CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE MEDICAL TOXICOLOGY BRANCH

SUMMARY OF TOXICOLOGY DATA

ZINC PHOSPHIDE

SB 950-111, Tolerance # 284

DECEMBER 9, 1987

I. DATA GAP STATUS

Chronic rat: Data not required at this time

Chronic dog: Data not required at this time

Onco rat: Data not required at this time

Onco mouse: Data not required at this time

Repro rat: Data not required at this time

Terato rat: Data not required at this time

Terato rabbit: Data not required at this time

Gene mutation: Data not required at this time

Chromosome: Data not required at this time

DNA damage: Data not required at this time

Neurotox: Data not required at this time

------Note, Toxicolo

one-liners are attached

** indicates acceptable study

Bold face indicates possible adverse effect

File name SB111ZIN.JG1

Grouped compounds: Aluminum phosphide (SB005, tolerance # 225, lead compound), magnesium phosphide (SB151, tolerance # 375) and zinc phosphide (SB111, tolerance # 284). Document 375-005, Record # 43724, is the "Guidance for the Reregistration of Pesticide Products Containing Magnesium Phosphide, An Amendment to the Registration Standard Issued February 1982", dated February, 1986. Requirements for all chronic, reproductive, teratogenicity and mutagenicity tests were waived for magnesium phosphide products. The swaiver holds for aluminum phosphide as in the standard in Document 225-005, Record 43729. The EPA document on zinc phosphide, 284-004, Record 018651, dated June 23, 1982, on page 4 indicates the studies will be waived if the unidentified residues are characterized as "toxicologically insignificant..."

II. TOXICOLOGY SUMMARY

CHRONIC, RAT

Not required at this time.

CHRONIC, DOG

Not required at this time.

ONCOGENICITY, RAT

Not required at this time.

ONCOGENICITY, MOUSE

Not required at this time.

REPRODUCTION, RAT

Not required at this time.

TERATOLOGY, RAT

Not required at this time.

TERATOLOGY, RABBIT

Not required at this time.

TERATOLOGY MOUSE

005, 007 028426, 035406 "Studies on the Teratogenicity of Zinc Phosphide." (Bowling G State University, 8/4/82) Zinc phosphide, no purity stated; given by oral gavage on days to 17 of gestation to groups of mice at 0, 0.004, 0.04, 0.4 or 4.0 mg/kg/day; 20 - 22 pregnant per group; NOEL \geq 4.0 mg/kg; no maternal toxicity and no developmental toxicity reported; unacceptable (no analysis of dosing solutions, no MTD; no clinical or necropsy observations, study conducted over a 5 month period, no justification for using mice, inadequate measurement of body weights.) JAP, 10/30/85 and JCC, 7/24/86.

MUTAGENICITY, GENE

Not required at this time.

MUTAGENICITY, CHROMOSOME

Not required at this time.

MUTAGENICITY, DNA/OTHER